1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

286 Among the Choroti, I have only seen a very few individuals wearing
291 the poncho, and the only specimen of this garment I succeeded in obtaining belonged to a half-grown youth. This poncho (fig. 35) consists of a woollen fabric, 160 cm long and 61 cm broad, in the middle of which there is a slit, 26.5 cm in length. The weaving consists of two-threaded, tightly spun yarn of greyish white (the natural colour of the wool) and red (now faded). Its ornamental design is formed by three broad, decorated strips, woven on double warp, so that on one side the pattern shows greyish white on red ground, and on the other side red, on greyish white ground. The fabric between these strips is rep, with the woof of greyish white yarn. Whether this poncho is of Choroti weaving, one cannot be certain. Possibly it has been obtained by Choroti from their Ashluslay neighbours, seeing that similar garments are not uncommon among the latter.[1]

[531]

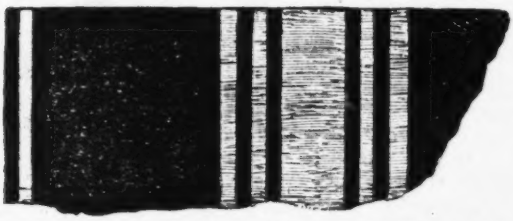

Fig. 33. Corner of man's mantle which is 204 cm long and 185 cm wide, of brownish-red wool, woven with groups of greyish yellow stripes. Gran Chaco, Bolivia. 1/4. Riksm. 03. 3. 1.

[531 171 422]

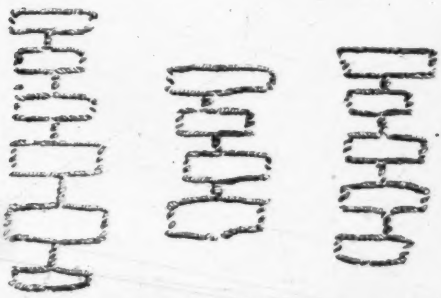

Fig. 34. Ornaments (probably property marks), placed in the middle of the mantle, a detail of which is seen in fig. 33. 1/2.

292 In the huts of the Choroti I frequently came across a kind of thick shirts, knitted from tightly spun
714 caraguatá-fibre threads (fig. 36), but I never saw them in use. In reply to my questions as to the reason for this, I was told that these garments are chiefly worn in fighting, when they are used as a protection against
[171] arrows. Caraguatá shirts are also used by the Ashluslay and the Mataco,[2] but in the literature on those Indians I have found no reference as to their being used as a protection against arrows. The Chiriguano, however,

[1] Nordenskiöld (11), pp. 111 and 112.
[2] Nordenskiöld (11), p. 107.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

as well as the Chaco tribes of the Guaikurú group, like the Choroti, wear these garments as war shirts.[1] In all the tribes just referred to (and the Ashluslay and Mataco as well), such shirts are worn exclusively by the men. The Caraguatá shirt here reproduced is knitted very tightly and closely (fig. 37), and, although its length is only 56 cm, exclusive of the shoulder straps, it weighs as much as 1.4 kg. The stripes that are worked in by way of ornamentation, have been formed by using string dyed black, and string dyed brown, alternately, in knitting. The parts that are between the stripes consist of undyed fibre. At the bottom edge of the shirt, small pieces of red and yellowish brown cloth have been tacked on; these originate from the whites.

Fig. 35. Child's poncho (a boy's) of wool, with woven ornaments. Ground colour brownish-red; ornament yellowish-grey. Choroti (probably manufactured among some other tribe). Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 4.

These mail shirts of caraguata fibre string are exceedingly well manufactured, and undoubtedly form a good protection against the Chaco Indians' arrows, which are usually wooden-pointed. Arrows with rod-shaped, iron wire points, or with leaf-like, edged, iron heads, on the other hand, would probably pierce even the thickest and most closely knitted caraguatá shirt. The shoulder straps in these mail shirts are knitted considerably thinner and less closely than the rest of the shirt, and this is only natural, as the function of the straps is to suspend the shirt, and not to give protection against arrows. Besides, they could only be hit by arrows dipping at an angle from above.

[1] Krickeberg (1), p. 131.

[C should be lower case. -Analyst]

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

and 40). Miss Agnes Branting, who has kindly examined the textiles here reproduced, found the frontlet in fig. 40 especially interesting, as similar fillets are woven by the peasantry in very many provinces of Sweden, for instance Scania, Halland, Wermland and Helsingland. Miss Branting writes on this matter as follows: »Fillets of this kind are made without any other implement than just any sort of object to which the yarn can be attached, say a weighted pincushion held on the knee. The weaving is begun from the centre of the fillet by crossing one yarn over another; for each turn a yarn is added (from a number fastened with pins) on either side. When the edge yarn has been reached, this is turned inwards, and the plaiting then proceeds from the edges towards the centre. This gives a certain firmness and compactness to the edges, and makes the middle portion slightly thinner, as may be noticed if looked at against the light.»[1]

Sometimes the frontlets are decorated with snail-shell spangles, sewn on, although such pieces of magnificence as the frontlet here shown in fig. 41 are very rare. From fig. 42 can be seen the way this frontlet is meant to be worn. These very decorative snail shell spangles are made from the shells of a large, white land snail (Borus oblongus, fig. 43), common in the Chaco. The Choroti do not themselves make these snail-shell spangles, but obtain them through barter from other tribes.

Narrow frontlets of woollen yarn (see fig. 30: the 3rd and 4th men from the left) or birdskin (see figs. 17 and 30: the boy who is fifth from the left) are of very common occurrence; less frequently seen are frontlets made from palm leaves, some of which are provided with chin straps, so as not to slip easily off the head (fig. 44).

Fig. 38. Legging, of deer skin with yellowish-brown hair-covering remaining. Worn for protection against thorny plants. Choroti, Gran Chaco, Bolivia. 1/6. Riksm. 03. 3. 383.

At dances and other festive occasions, the men are fond of wearing particularly handsome, broad frontlets or head ornaments of stiff or downy

[1] Compare with this a method of hand weaving described from the Choroti by Erland Nordenskiold. Nordenskiöld (12), p. 111.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

292 feathers, tied inside a woven or plaited fillet, usually no more than a
302 centimetre wide, of coarse caraguatá or woollen-yarn (fig. 45).

And it is also principally at dances that the men of the Choroti wear a sort of knitted skullcaps of woollen-yarn, net-like, and with a chin strap.

142 301 304 322

Fig. 30. A man with a woven frontlet of wool (greyish-white and brownish-black), and ear-lobe discs of wood. Choroti. Gran Chaco. Bolivia. Photo. E. v. R.

● [531] These hair-nets are often studded with snail-shell spangles (fig. 46), or the chin straps decorated with down (fig. 47). With the magic character of these and other ornaments from the Chorotis,[1] I shall deal in a later chapter.

[1] [should be Choroti — analyst]

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

To the frontlets are affixed one or more feathers (figs. 32, 16—18, 24, 30 and others). These are obtained from many different birds, ranging from ostrich and white heron to domestic fowls. The feathers are often nicked,

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302
237

Fig. 40. Frontlet, of wool, with angular ornament in brownish-black and greyish-white. Choroti. Gran Chaco. Bolivia. 1/6. Riksm. 03. 3. 9.

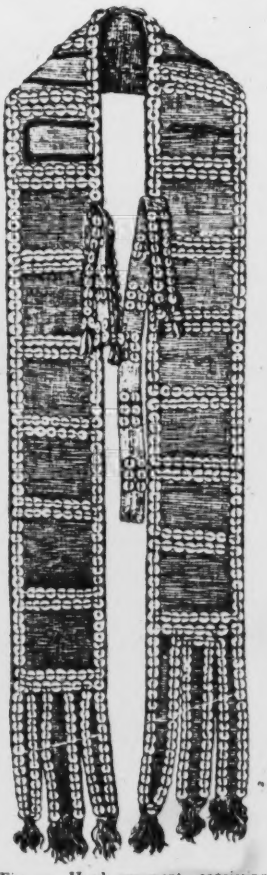
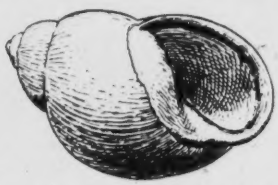


Fig. 41. Head ornament, consisting of a red, woollen, frontlet, 7 cm wide, with snail-shell spangles sewn on, and, in front, beset with turquoise-blue glass beads. Choroti. Gran Chaco. Bolivia. 2/3. Riksm. 10. 3. 134.

[531]

Fig. 42. A Lengua Indian with head ornament, »scalp lock» and whistle (the latter hanging round the neck on a string). From Hawtrey.[1]



[825]

Fig. 43. Borus oblongus, a white land snail, common in the Chaco. From its shell the Indians make small spangles, with which they adorn themselves. Gran Chaco, Bolivia. 1/1. Riksm. 03. 3. 47.

[1] Hawtrey (1), p. 282, fig. 2.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

kind, the total length of which may amount to as much as 15 metres. Thus, for instance, the ornamental outfit seen in fig. 56 consists of two necklaces, respectively 4.39 and 4.61 metres long.

Necklaces of mussel- or snail-shells of the shape shown in fig. 57 and 58 are also popular. The necklace, fig. 57, consists of 15 spangles made from shells of the common river mussel of the Chaco. The spangles, which are only slightly more than one millimetre thick, are chipped or ground into more or less circular shape, and in, or near, their centre have a perforation right through. Through these holes a string is threaded, so as to keep the spangles fixed in the way shown in the picture. On the reverse sides the spangles retain the rough, greenish brown surface of the mussel-shell; their front sides display the mother of pearl lustre peculiar to the inner side of mussel-shells. In each spangle the front face is pitted with 4 to 5 shallow borings, which either have a magical significance, or may be only designed to enhance the decorativeness of the necklace.

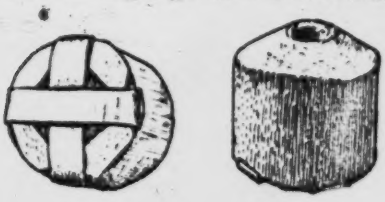


Fig. 54. Ear-lobe discs, of wood with tin mountings. Choroti. Gran Chaco. Bolivia. 2/3. Riksm. 03. 3. 57.

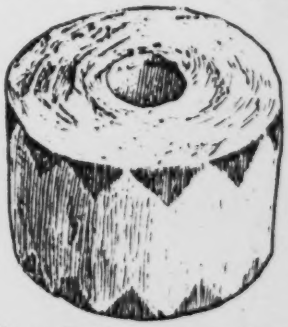


Fig. 55. Ear-lobe disc of wood, bored right through. On its cylindrical surface ornament has been burned in. Choroti. Gran Chaco. Bolivia. 1/1. Riksm. 03. 3. 56.

The tags on the necklace shown in fig. 58 consist of rectangular slabs of mussel- or snail-shells. These slabs, which have been very neatly chipped into shape, possess on their front sides a beautiful mother-of-pearl lustre, although they are not of such high opalescence as the spangles in the necklace, fig. 57. The front side of each tag has 3 to 5 shallow borings, the hinder side is bone white. Necklaces of this kind, with quadrilateral tags of mussel- or snail-shell, are specially characteristic of the Chaco.[1]

The Choroti have acquired glass beads from the Europeans, but such beads are far less valued than spangles or the thin plates of snail- or mussel-shells.

[1] Krickeberg (1), p. 132.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

302 bamboo holder, 10 to 15 cm long, and 1 to 2 cm in diameter. The bottom of this cylinder consists of a joint in the bamboo, and for its mouth there is a stopper of wool, grass, bast or bees-wax.

[291] In painting the face, the paint is put on with small stamps, which either consist of the jaw-bone of a siluroid (figs. 81, 88 b) or of a piece of carved wood (fig. 82). Flat wooden stamps with diamond pattern are also used.[1] Those interesting stamps that are made from jaw-bones of fishes, are undoubtedly the prototype of the wooden stamps.

[531]

Fig. 81. Jaw-bone of a siluroid. The row of teeth is used as a stamp for putting on the paint in face-painting. The fore-end of the bone is sharpened to a point, so that this object can also be used in tattooing and blood-letting. Choroti. Gran Chaco. Bolivia. 1/1. Riksm. 03. 3. 100.

[304]

[303 515]

Fig. 82. Paint stamp made of a cane splinter. Is used in the same way as the fish jaw in fig. 81. Choroti. Gran Chaco. Bolivia. 1/1. Riksm. 03. 3. 94.

For cutting off the hair to the desired length (figs. 16—24, 30, 39, 53 and 83), the Choroti use the jaw of the palometa fish, which is set with exceedingly sharp teeth (fig. 84).[2] These are also used as louse-combs, although the Choroti as a rule carry on their louse-hunting only by the means that nature has provided them with. It is possible that once upon a time palometa jaws formed the only combs that the Choroti possessed, but that they afterwards went out of fashion when the more practical wooden or split-cane combs came into use. Of the latter, we may take it that the split-cane combs are the

Fig. 83. A man with hair hanging loose. Choroti. Gran Chaco Bolivia. Photo. E. v. R.

Fig. 84. Jaw of palometa fish (Serrosalmo sp.), used for hair-cutting. Also said to be a louse-comb. Choroti. Gran Chaco. Bolivia. 1/1. Riksm. 10. 3. 29.

[1] Nordenskiöld (11), fig. 42.
[2] Nordenskiöld (13), p. 100.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

or chest of the water carrier.[1] When the pitcher has been filled with water, its mouth is closed with a stopper of grass or leaves.

The cooking pots, which consist of burnt clay (figs. 125 and 126), are also used for roasting various vegetables. Pots of this kind from the Choroti are sometimes given wart-like decorations. These are either placed in rows some distance apart from each other (fig. 125) or in rows close together (fig. 126). This manner of ornamenting clay pots is of extreme antiquity in the New World, and occurs on grave finds right up through North America.[2] The little protuberances on the pot in fig. 125 have been produced in a different way to those on the handleless pot in fig.

Fig. 125. Cooking and roasting pot of earthenware burnt black. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 150.

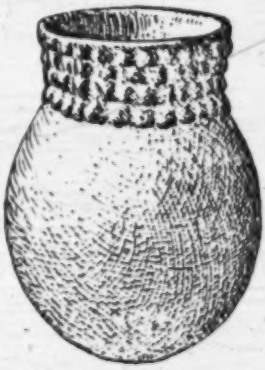


Fig. 126. Cooking and roasting pot of earthenware burnt black. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 10. 3. 54.

126. On the case of the former, they consist of small clay pellets which have been stuck on the pot before burning, whilst the protuberances on the latter probably have been pressed up out of the wet clay by the potters fingers.

All pottery is made by women. The clay is mixed with powdered potsherds, then well kneaded and formed with the hands into rolls, as thick as a finger, with which the pot is built up.[3] When this has been completed as to its shape, its surface is polished by means of a mussel shell or a

[1] Water-drawing and carrying is exclusively a work for women.

[2] See, for example, Holmes (1), pl. XI, fig. g, and Moore (3), fig. 42.

[3] Cf. figs. 217 and p. 214. On the subject of Indian pottery-making, see for example Holmes (1), and Nordenskiöld (19).

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

323 smooth wooden stick, and, if desired, the above mentioned wart-like
[531] ornaments are then put on. Painted clay vessels are not found among the Choroti.

415 For holding water, beer, and other fluids, the Choroti use not only
531 clay vessels but also calabash bottles. Small calabash bottles (figs. 127 and 128) are used for keeping toilet articles, such as colour seeds, beads, and other things. Such articles are also kept in boxes of calabash (fig. 129). Flour is kept in large calabash boxes (fig. 130). Of calabash shell are also made bowls or dippers (fig. 131), and spoons (fig. 132).

Fig. 127. Calabash bottle with incised ornament. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 172.

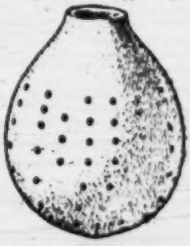


Fig. 128. Calabash bottle inlaid with turquoise coloured glass beads. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 175.

Fig. 129. Calabash box, inlaid with glass beads, and with carved ornament. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 67.

Fig. 130. Calabash box with carved ornament. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 176.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

Bottles, boxes, bowls, dippers and spoons, of calabash, are often ornamented in some way or other. Small calabashes (figs. 128 and 129) for toilet articles are inlaid with beads, and on the latter there is also carved ornamentation. The bottle (fig. 127) and the box (fig. 130) have likewise been decorated by carving, but the ornamentation on the dipper (fig. 131) has been produced by burning. Occasionally ornamentation of calabashes has been effected both by carving and burning, an example of such composite technique being the spoon in fig. 132. The ornamentation is sometimes regularly arranged, figs. 127 and 132, but it often seems to have been placed without any plan whatever, as in figs. 129 and 131. According to investigations by Nordenskiöld and Karsten, the latter kind of ornamentation may not infrequently possess an especial significance; representations of human beings, animals, roads, fields, forests, and so on,[1] and its purpose is probably not only decorative but also magical.[2]

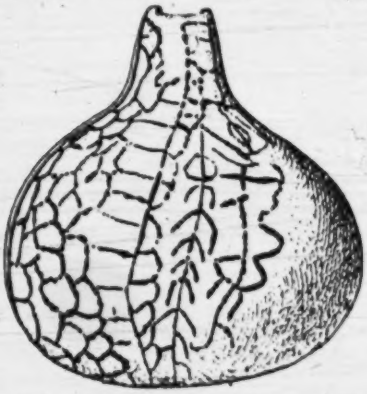


Fig. 131. Dipper, of calabash, with ornament burnt in. Choroti. Gran Chaco. Bolivia. 1/2. Rikssm. 03. 3. 164.

Fig. 132. Ladle, of calabash, with ornament both carved and burnt in. In the figure, the latter are shaded. Choroti. Gran Chaco. Bolivia. 1/2. Rikssm. 03. 3. 166.

Many primitive peoples, in the Old World as in the New, use mussel-shells for spoons. The Choroti have spoons consisting of one of the halves

[1] Cf. Nordenskiöld (13), figs. 62 and 63.
[2] Karsten (3), p. 179.

276 the smoke of tobacco oil. Wooden pipes are often decorated with burnt-in
[531] ornament (figs. 155—157 and 159—161), or, once in a while, with carved ornamentation (fig. 161), or mountings of tin.

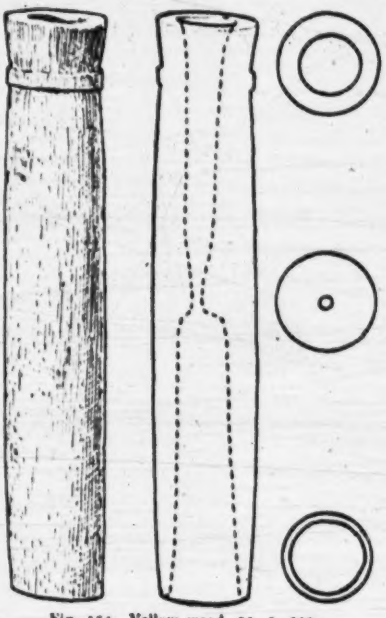


Fig. 154. Yellow wood. 03. 3. 219.

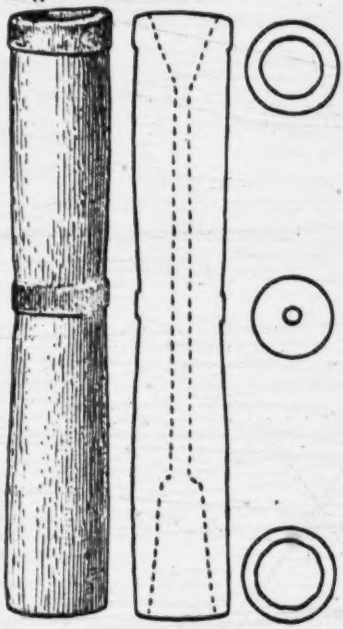


Fig. 155. Yellow wood; the rings carved in relief are coloured dark by burning. 03. 3. 224.

Tobacco pipes of wood. Choroti. Gran Chaco. Bolivia. 2/3. Riksm.

The straight type of pipe much resembles our modern cigar holders, but is nevertheless an ancient American cultural element. Straight tobacco pipes are found in widely separated parts of the New World, and in archæological excavations in North America, pipes of this kind have been found of burnt clay, among other materials, which probably are pre-Columbian.[1]

276 The Choroti Indians never smoke whilst working, or otherwise moving
517 about, but keep this form of indulgence for their sociable talks, their meetings, or drinking bouts. No Choroti, when in company with others,

[1] E. g. Holmes (1), pl. CLVI. For the distribution of the straight tobacco pipe in North and South America, see, for example, McGuire (1), and Nordenskiöld (21).

[text continues on p. 140]

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

276 smokes his pipe alone, but lets it pass, by turns, from mouth to
517 mouth. Similarly to other primitive peoples, the Choroti not only take the smoke into their mouths, but also inhale it into their lungs, a method of smoking which apparently gives them great satisfaction.

534 The Choroti are only indifferently gifted for music, and their musical instruments are exceedingly primitive. These consist of flutes and whistles of bone, whistles made from skulls, disc-shaped whistles made of

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531]

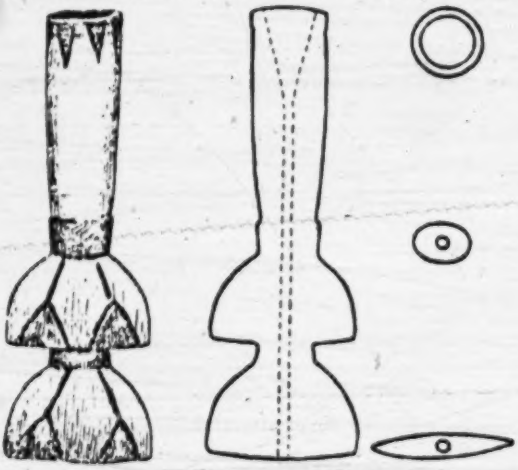

Fig. 160. Yellow wood. Ornament burned in. Riksm. 03. 3. 231.

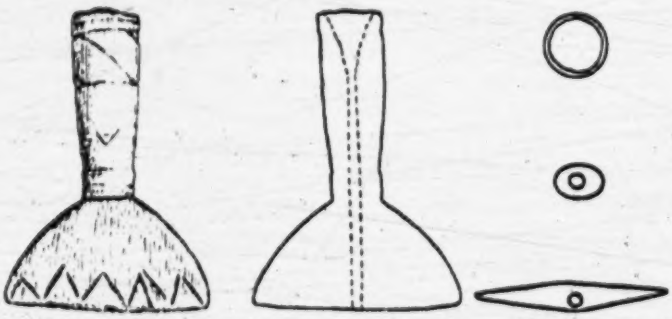

Fig. 161. Yellow wood. The ornament on the mouthpiece and a ring round the mouth of the bowl are burned in. The mark resembling an inverted letter A is carved. The lower ring on the bowl, and the lines that are obliquely issuing from it, are carved and painted red. 03. 3. 232.
Tobacco pipes of wood. Choroti. Gran Chaco. Bolivia. 2/3. Riksm.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

534 What has above been said concerning the construction and the way of blowing on ancient Peruvian, and Brazilian, flutes, applies in every particular to Choroti reed flutes of the type seen in fig. 162.

With whistles of the construction shown in fig. 163, different tones may naturally be produced by opening or closing the three round holes made

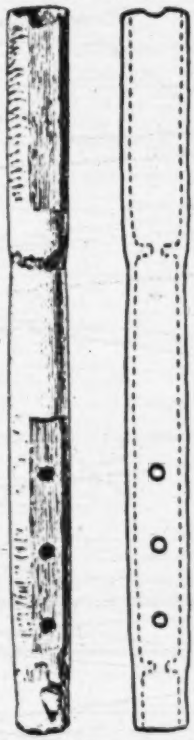

Fig. 162. Flute, of reed. Incised ornament. Choroti. Gran Chaco, Bolivia. 1/3. Riksm. 03. 3. 208.

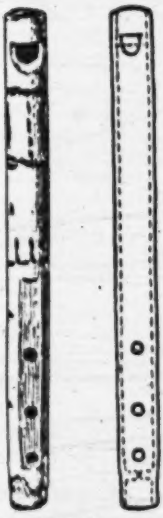

Fig. 163. Whistle, of reed. Ornament burned in. Choroti. Gran Chaco. Bolivia. 1/3. Riksm. 03. 3. 210.

Fig. 164. Whistle, of a bird bone. Choroti. Gran Chaco. Bolivia. 1/3. Riksm. 03. 3. 213.

through the side of the instrument at its lower end. At its upper end the opening is partly closed with wax. This particular whistle is blown in the same way as our ordinary whistles. Some closed Choroti reed whistles are only provided with one hole, usually semicircular, near the opening of the mouthpiece, and are thus without any holes by which different tones can be produced.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

534 and Yuracáre. Outside the Chaco, and the regions bordering on it, this type of whistle has not, so far, been found.[1] It is noteworthy that, generally speaking, these whistles have been given a similar, very characteristic, ornamentation. It is only such whistles as originate from the Yuracáre that form an exception from this rule.[2] The ornamentation, which is usually carved in the wood, in low relief, consists of a figure more or less
[531] resembling a cogwheel, with a wheel-cross in its centre (fig. 166). Such whistles as have a tin mounting are sometimes without the wheel-cross (see fig. 165).

789 This ornamentation is probably of some magical significance.[3] For the
534 fact is that these disc-shaped whistles are not only a combination of
531 ornament and musical
301 instrument, but they are also put to magical use. Karsten relates that the Choroti Indians, whilst performing their exorcismal dances, now and then blow their disc-shaped whistles to scare off evil spirits.[4]

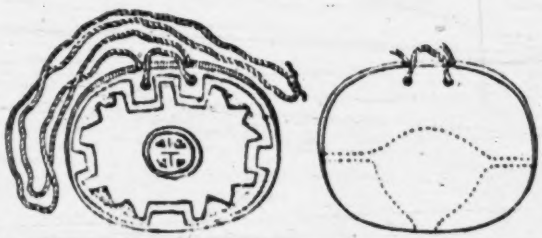

Fig. 166. Disc-shaped, wooden whistle, one side with carved ornament, the other side plain. Used like the whistle in fig. 165. Choroti. Gran Chaco, Bolivia. 1/1. Gothenburg Museum, D. 793. From Nordenskiöld (11), fig. 56.

In a monograph on whistles I have endeavoured to show that the practice of carrying ornamental whistles is of remote antiquity in America, and I think I have adduced very strong evidence of the so called »mesh-spacers» of antler or polished stone, that have been found in graves in North America, being, as a matter of fact, used as ornamental whistles, and possibly of a magical character.[5]

534 The disc-shaped Choroti whistles are blown at the lower aperture (see figs. 165 and 166), and with the same technique in blowing as described in connexion with the description of the flute in fig. 162. By the closing

[1] Nordenskiöld (11), pp. 188 and 180.

[2] Nordenskiöld (11), p. 188.

[3] Of the wheel-cross having been, and still being, also in America the characteristic symbol of the sun, we possess reliable proof. See e. g. Frobenius (1), fig. 298. Cf. also d'Alviella (1), pp. 76 and 77; and Holmes (1), plate XXXVIII.

[4] Karsten (1), pp. 34 and 35.

[5] von Rosen (8), p. 114 et seq. and Gustaver (1).

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

534 of magic, and on this matter he writes as follows: »These drums consist of a plain clay pot, which is partly filled with water and has a goat- or deerskin stretched over it. Here the water evidently serves no practical purpose. It may therefore be supposed that the idea was simply to strengthen the magic force that the drum gave out when beaten upon.»[1] Karsten's saying that the water in the pot could serve no practical purpose seems to me strange, as, by practical experiment, one can easily satisfy oneself that a Choroti drum partly filled with water gives out quite a different tone to what it does when quite empty. We also know that elsewhere similar means are employed for tuning drums as desired, for it is stated by Engel that the Chinese used to fill their »po-fu» or »ku» drums, wholly or partly, with rice husks, in order to give roundness and mellowness to the tone.[2]

[531]

Fig. 170. Magic rattle, of calabash with incised ornament. Carrying cord of red, woollen yarn. Choroti, Gran Chaco, Bolivia. 1/1. Riksm. 03. 3. 386.

Figure 170 shows a magic rattle consisting of the shell of a calabash, and containing a dark-blue, much worn, piece of glass and two kinds of almost spherical seeds, one of them being black and the other yellow. The latter have a diameter of 5 mm; they belong to a species of Smilax. Professor Fries has pointed out to me that the roots of Smilax species are officinal. It has not been possible to determine the black seeds; their diameter is 4 mm. In the handle is fixed a carrying cord of

[1] Karsten (3), p. 205: »Diese Trommeln bestehen aus einem einfachen Tontopfe, der zum Teil mit Wasser gefüllt und mit einer Ziegen- oder Hirschhaut bezogen ist. Das Wasser dient in diesem Falle zu keinem anscheinend praktischen Zwecke. Wir können daher annehmen, dass man einfach glaubte, die zauberische Kraft zu erhöhen, die dem Tontopfe anhaftete, und die von der Trommel ausstrahlte, wenn sie geschlagen wurde.»

[2] Engel (1), p. 41: »The po-fu used to be partly filled with a preparation made from the husk of rice, *in order to mellow the sound*.» Italics by von Rosen.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

172 Particulars of the objects in question are given in the table here below:

Objects painted all over with red paint, found by the author in ancient Indian graves at Casabindo, Puna de Jujuy, Argentina.

Riksm. coll. No.	Class of object	No. of fig. in von Rosen (10)	No. of page on which object is mentioned in von Rosen (10)
03. 3. 6797	Long handled spoon	—	38
03. 3. 6826	Pointed stick	53	37
03. 3. 6809	Distaff	—	31
03. 3. 6819	Small club (fish club?)	42	34
03. 3. 6833	» » » »	41	33
03. 3. 6830	Wooden knife	59	38
03. 3. 6871	Miniature bow	45	34
03. 3. 6873	Fragments of arrow shaft	-	35
03. 3. 6821	Mesh-spacer	39	32

304 751 On page 72 et seq., I have already described the manner in which the Choroti tattoo themselves, and also pointed out that this tattooing is of a magical character whilst at the same time this practice, like the painting of the face, is to a certain extent connected with the sexual life of the Indians. It is highly probable that not only the painting, but also the tattooing, of the face among the Choroti is done in order to prevent evil spirits from entering the body by way of eyes, nose, mouth and ears.[1] The arrow-like signs that sometimes are found as ornament done in tattooing or painting among the Chaco Indians (see for instance fig. 66), are, according to Karsten, in some way connected with the circumstance that the spirit of illness, called »mohsek ihitek» (i. e., the arrow-shooting mohsek) uses arrows for working harm upon people, for which reason arrows may be considered as amulets.[2] This, the Indians' way of looking at things, corresponds to the old saw: »like cures like», or »taking a hair from the dog that bit one».

531 751 Figures and ornamental signs, incised or burned-in, on calabashes for household use (figs. 127, 129—132) as well as on magic rattles of calabash (figs. 170 and 181), are, at least in certain cases, to be regarded as magical protective devices against evil spirits.[3] The significance of two figures, resembling human beings, carved on the magic rattle in fig. 181.

[1] Karsten (4), pp. 8 and 10.
[2] Karsten (4), pp. 190 and 191.
[3] Karsten (3), p. 179.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

I cannot tell, but from an analogous carving from the Lengua it is very probable that they represent spirits.[1]

Most rattles contain seeds, and in many of them are also found a large number of metal fragments (see synoptical table below). The latter as a rule consist of small, square pieces of tin plate, for the most part with a side of from 5 to 15 millimetres. Bits of glass do not unfrequently occur in the rattles, although never in any great numbers; generally only a few bits of glass are found in any one rattle. In the Chaco, bits of glass are naturally extremely rare. In the rattle reproduced in fig. 181 were only found bits of tin plate and one cactus spine. Although this rattle belongs to the handle hole type (see pp. 148, 149), it nevertheless has a hole in the bottom, with a plug of the kind I have described in connexion with the magic rattle, fig. 170. Professor Robert Fries has been kind enough to examine the different kinds of seeds that I have found in magic rattles, as well as in the bag mentioned below, and he then determined the presence of a species of Canna, a leguminous plant, a species of Convolvulaceæ, one of Sapotaceæ and a Smilax. Several kinds of seeds could not be identified from lack of material to compare them with.

Synoptic table of contents in magic rattles from the Choroti.

Riksm. coll. 03.3.

No. of rattle	Type of rattle	Contents
386	Plugged hole through bottom. Carrying cord (fig. 170).	Seeds (Smilax and undetermined), 1 dark blue piece of glass.
385	Ditto.	Seeds (Smilax and Canna), 2 bits of zinc plate, 1 spiral spring of iron, 2 cactus spines.
390	Plugged hole through top of handle, ditto through bottom. No carrying cord. (fig. 181)	Nine bits of plate iron, one cactus spine.
384	Like foregoing, but no hole at the bottom.	Seeds (Canna and undetermined), 2 bits of plate iron.
387	Ditto.	Seeds (Smilax, a leguminous plant, and of unknown species), 34 black glass beads, 1 blue glass bead and 4 yellowish-green bits of glass.
388	Ditto.	Seeds (Convolvulaceæ and unknown), 1 piece of zinc plate, and 1 uncoloured piece of glass.

From a Choroti I obtained by barter a small bag of red cloth (Riksm. 03. 3. 391), abundantly wound round with caraguatá string, in which he said he used to keep the things that he put into magic rattles.

[1] Grubb (1), p. 75, and fig. a on plate following p. 76.

778 This bag was found to contain a large number of seeds of many different kinds (fig. 182: 22—29); 39 quadrilateral pieces of plate iron (fig. 182: 12, 13, 16—18), 3 curiously shaped pieces of plate iron, about 25 mm in length (fig. 182: 15); 4 plate iron ferrules, or casings (fig. 182: 14; these were probably once mountings on leather fringes attached to a girdle of the type seen in fig. 31); 6 pieces of tin (fig. 182: 1—6); 1 turquoise-coloured glass bead (fig. 182: 20); 1 fragment of ditto (fig. 182: 21); 1 piece of uncoloured glass (fig. 182: 19); 4 blue pieces of glass (fig. 182: 30—33); and 4 green ditto (fig. 182: 7—11). Through friction against each other all these bits of glass have got their sharp edges worn off and their faces ground dull; in shape they now exactly resemble small quartz pebbles. I think it very probable that all the objects contained in this bag, or inside magic rattles, are attributed with magic power, and that, therefore, in the selection of them consideration must have been given not only to their capabilities as sound-producers, but also to their supposed magic properties.[1]

[531]

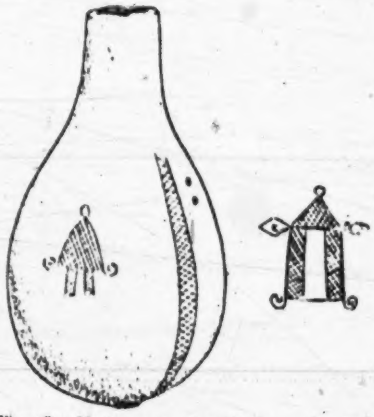

Fig. 181. Magic rattle of calabash, carved with figures probably of magic significance. Choroti. Gran Chaco, Bolivia. 1/2. Riksm. 03. 3. 390.

000 Many investigators have established the fact that primitive peoples' ornaments are very often of a magic character. Among certain tribes practically all ornaments may be looked upon as being more or less potent amulets. In my book, »Tråskfolket» (»The Batwa of Lake Bangweolo»), I have shown that among the tribes around Lake Bangweolo the belief is very widely spread that many ornaments, such as necklaces, bracelets, glass beads, etc., possess magic properties, and that they are able to give protection, not only against divers illnesses, but also against other evil-things, such as wild animals, etc.[2]

That the same conception is prevalent among the Indians of South America has been set forth by many students, among whom, von den

[1] Cf. Karsten (4), pp. 143—144.
[2] von Rosen (1), pp. 160, 301—305, 351, 352 and 423.

[text continues on p. 173]

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

that the Indians prefer to use them for barter rather than as an article of clothing. Woven cloaks have, moreover, displaced fur cloaks. Characteristically it is exclusively the conservative women in the Chaco who wear the fur cloak.

Fur cloaks are worn in the Chaco with the fur inside. The plain side of the skin is generally painted. Each skin is painted separately, and then a number are sewn together.

The Tehuelche also wear their cloaks with the fur inside. The Ona, however, wear them with the fur outside, and this tribe leaves the plain side unpainted.

I have seen these cloaks among the (6) Mataco, (2) Ashluslay and (7) Toba, where they are usually made of coypou skin, rarely of sheep or fox-skin. DOBRIZHOFFER[1]) mention them from the (17) Abipone, DUCCI[2]) from the (9) Toba, SANCHEZ LABRADOR[3]) from the (12) Mbayá, SCHMIDEL[4]) from the (3V) Querandi, HAWTREY[5]) and GRUBB[6]) from the (8) Lengua, STADEN[7]) from the southern (38) Tupinambá, ARAÚJO[8]) following PERNETTY from the (44) Charrúa, SEPP[9]) from the (64) Yaro-Chaná, FALKNER, MUSTERS, PIGAFETTA[10]) and others from the (26) Patagonians, GALLARDO, COLAZZI, OTTO NORDENSKJÖLD and others from the (27) Ona, SKOTTSBERG[11]), MEDINA[12]), HYADES and DENIKER[13]) and other from the (XV) Yahgan, the (2V) Chono and the (1V) West Patagonians.

[531]

1) Vol. 2, p. 132.
2) p. 10.
3) Vol. 1, p. 280.
4) p. 150.
5) p. 282.
6) p. 62.
7) Vol. 2 (p. 3).
8) p. 120.
9) p. 50.
10) p. 12—13.
11) p. 207.
12) pp. 106—107.
13) p. 317.

2: Nordenskiöld E-5 (1908-1909)1919
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A
C
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whistles of this kind, though less frequently, among the (6) Mataco[1]). I have also seen them among the (4) Chiriguano, (5) Chané, (3) Tapiete, (23) Churápa and (22) Yuracáre. GRUBB[2])

C
[534
533]

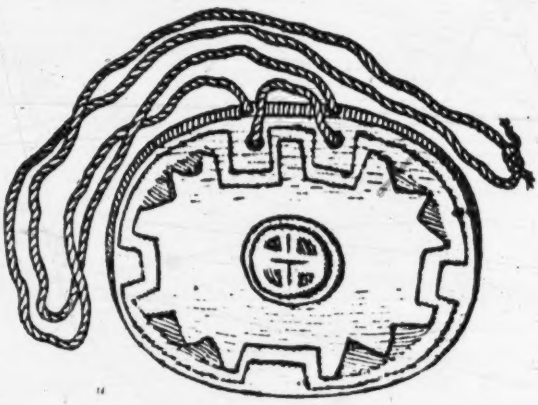

Fig. 50 a. Wooden whistle. Choroti G. M. (D. 793) 1/1.

mentions them from the (8) Lengua and Campana[3]) from the (9) Toba. This type of whistle, therefore, occurs within a continuous area along the Andes and in the Chaco. (Map

C
[534]

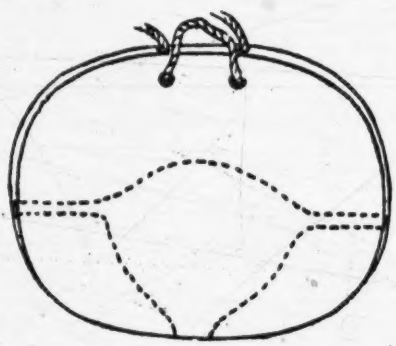

Fig. 50 b. Section of the same.

[1]) R. M. (03. 3. 500).
[2]) p. 75.
[3]) (2), p. 410, fig. 10 b.

2: Nordenskiöld E-5 (1908-1909)1919
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Valle del Rio Chubut[1]), in the (O) Rio Parana[2]), in the (N) upper Rio Parana[3]), in all the old Inca country[4]), also in Ecuador[5]), in S. Chili[6]), in Cundinamarca[7]), and Cauca[8]), and at Sta. Marta in Columbia[9]), on (P) Aruba island[10]) on the (S) island of Trinidad[11]) and at (R) Lago Tacarigua[12]).

Besides the above mentioned tribes we find, among present-day Indians earthen vessels provided with handles among the tribes of (48) N. W. Brazil[13]), the (54) Guahibo[14]), the Köggaba[15]) Motilones[16]) Goajiro[17]), the Arawaks[18]) on the coast of Guiana, the Araucanians[19]) and the (8) Lengua[20]).

In addition there are some tribes who have quite lost their primary civilization, e. g. the Mojo. The pottery in the archeological excavations at Mojos is, as already mentioned, without handles.

A C 323 531

When ornamenting their earthen vessels the Choroti and Ashluslay never paint them before burning, but the latter sometimes do so afterwards. On some vessels there is plain

1) Outes y Bruch (5), fig. 115.
2) Torres (2), p. 88.
3) Mayntzhusen, p. 466. (rare).
4) Uhle, Seler, Reiss u. Stübel, and other works.
5) Uhle, do.
6) Photo. G. M.
7) Uhle (1), Pl.
8) Uhle (1), Pl.
9) G. M. Bolinder's collection.
10) Josselin de Jong, Pl. 21, 13, 14 15, etc.
11) De Booy, Plate 5 a.
12) Marcano, p. 55. Pl. 12, Fig. 39. p. 57, Pl. 15. (Handle small and rare).
13) Koch-Grünberg (3), Vol. 2, p. 224.
14) Stradelli, p. 31.
15) Bolinder (4), p. 130.
16) Bolinder (2), p. 39.
17) Candelier, p. 267.
18) Ten Kate, p. 107 «Waar men aan kruiken, kommen enz. hengsels of ooren vindt, moet men aan Europeesch namaaksel denken.»
19) Latcham (1), p. 310.
20) Grubb, Pl. p. 74.

[Text continues on p. 217]

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

ornamention executed by means of the wooden tools used for polishing. Among the Choroti and Ashluslay I have seen no clear finger-print ornamentation. On the other hand this is not uncommon among the Mataco-Vejos, the Mataco who dwell in immediate contact with the Chané, who often embellish their pottery with such ornaments.

On the Choroti vessels and still more frequently on those of the Mataco the clay-coils themselves are sometimes retained as ornaments.

The distribution of finger-print ornamention (Map 40 Fig. 66) differs altogether from that of the handle. While the handle is an element of civilization which evidently came to the Chaco from the mountain civilization, finger-print ornamentation came from the east, probably from the Guarani Indians.

I have indicated in the table the tribes among whom I have seen this kind of ornamentation. In my archaeological excavations I have found[1]) such ornamentation at (ö) Tarupayu near the upper Rio Pilcomayo; at (o) Incahuasi between the Rio Parapiti and the Rio Grande in S. Bolivia, and in the province of (e) Sara not far from Sta. Cruz de la Sierra.

Ameghino[2]) mentions this ornamentation from the province of (H) Buenos-Aires, Outes[3]) from (p) San Blas, not far from Bahia Blanca in Argentina.

Meyer[4]) from (q) Laguna in Sta. Catharina in S. Brazil, Torres[5]) from (r) Entre Rios, Kunert[6]) from (S) Rio Grande do Sul (Region de Cahy and Forromecco), and Grubb[7]) from (f) the country of the Lengua Indians.

[1]) Nordenskiold (10), Figs 19—22.
[2]) Vol. I Pages 280—291, Pl. 6.
[3]) (4), p. 267, fig. 35.
[4]) P. 340.
[5]) (1), fig. 3.
[6]) P. 33.
[7]) Grubb, p. 73. »Broken pieces of old pottery have been found bearing scorings, as if made by the pressure of the thumb, and are said to be the work of spirits.«

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

Ornamentation of this kind is found, too, on earthen vessels from (N) Alto Parana[1]), the vicinity of Bompland, Missiones in N. Argentina[2]). KISSENBERTH's[3]) discovery of this form of ornamentation on potsherds which he found near the Dominican mission (g) of Conceiçao do Araguaya is extremely interesting. They are probably relics of the migration of the Tapirapé Indians. These Indians are Guarani and were possibly driven from the coast to their present district owing to the slave raids of the Portuguese.

Occasionally pottery is found in other parts of S. America sporadically with fingerprint ornamentation on the rim of the vessel. Typical finger-print ornamentation, however, is only found in the parts indicated on the map.

The Ashluslay do not paint their pottery before but after burning. This may be due to their not having in their country the colouring materials requisite for painting before burning. I have not got painted pottery from the Choroti.

For colouring, the (2) Ashluslay use the resin of a tree, «palo santo».[4]) Besides these Indians and other nearly related Chaco tribes, the (7) Toba, (3) Tapiete, (8) Lengua[5]), (12) Mbayá[6]) and (11) Chamacoco[7]), I have only seen the (5) Chané use similar resin for the painting of their pottery, which painting, however, is done before burning. The latter sometimes resin the rim of a vessel after the burning, while it is still warm. There are very considerable areas of S. America where the art of painting pottery has not been understood, and is not understood to-day. In the first place the art was known to the tribes on the Andes (the shaded area on the map) as well as the Guarani tribes and the major-

[1]) KUNIKE, p. 158, fig. 96.
[2]) G. M. BACKMAN's collection.
[3]) (2), p. 77, fig. 26.
[4]) Bulnesia Sarmienti.
[5]) GRUBB, p. 73.
[6]) COLINI, p. 313.
[7]) K. v. d STEINEN (4), p. 325.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
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the Mbayá:— «Labran una especie de calabazos grandes sacandoles con delicadeza un pedazo por el pezon que despues ajusta como tapa», — e. g. *the lid and the calabash-box are always from one and the same fruit.*

The calabashes are frequently ornamented, sometimes by burning, sometimes by cutting. Should a large calabash crack, the Choroti and Ashluslay generally mend it by sewing together the edges. (See Fig. 68).

Calabashes with lids of this kind (Fig. 67) are found among the (18) Quichua[1]), (4) Chiriguano[2]), (6) Matacos[3]).

(X 4) Payaguá[4]), (12) Mbayá[5]), Kadiuéo), (8) Lengua[6]), (8) Angaité[7]), (21) Cainguá[8]), and (36) Ijca[9]) as well as the (2) Ashluslay and (1) Choroti.

Furthermore, calabashes with similar lids (Map 42) are mentioned from excavations in (D) ? the Puna de Jujuy[10]), from (A) the coast of Peru[11]), from (γ) the neighbourhood of Cuzco[12]), and from (G) Capamitas in the borderland of Peru and Bolivia[13]). We see that the distribution in S. America of lids of the kind here described is in the west Plainly we have to do with a cultural element which the Chaco Indians have derived from the western area of civilization

Calabashes with lids of a rather different type are mentioned by KRAUSE from the (15) Kayapó[14]), by Kissenberth[15])

1) G. M. 15. 1. 87.
2) G. M. 15. 1. 144.
3) R. M. (M. 1251).
4) M. C. (He. 316, H. 322 a. H. 023.)
5) BOGGIANI (2), Fig. 50.
6) GRUBB, p. 74.
7) M. f. V. C. (17034, Collection FRIČ.)
8) M. f. V. C. (613 i).
9) G. M. BOLINDER.
10) LEHMANN-NITSCHE (1), Pl. 3, Fig. 4.
11) REISS und STÜBEL, Vol. 3, P. 82, fig. 4.
12) M. f. V. B. (V. A. 8900).
13) NORDENSKIÖLD, (3), S. 24. R. M. (06. I. 408.)
14) Fig. 215.
15) (1), fig. 1.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

from the (5X) Canella, and KOCH-GRÜNBERG[13]) from the (48) Yahúna, Rio Apaporis.

A C [415 53] Calabashes with encaustic ornamentation (Map 43) are rare among the Ashluslay, somewhat more common among the Choroti, and very common among the Mataco. They are found among the Toba and, very generally, among the Chiriguano and Chané. They are quite wanting in the tribes I visited in N.E. Bolivia and the adjacent country, although some of these tribes, e. g. the Guarayú (Pauserna) have got richly ornamented calabashes.

Calabashes with encaustic ornamentation are also known from the (14) Bororó[2]), (20) Paressi-Kabíšĭ[3]), (28) Bakaïrí[4]) and other tribes on the upper Rio Xingú, (13) Karajá and (50) Šavajé[5]) (21) Cainguá[6]), (29) Caingáng[7]), (41) Šokleng[8]), the Indians of (09) Chachapoya[9]), Peru, (47) Arecuna[10]), (47) Makusi and Wapischana[11]), the Indians on the Rio Pichis, Rio Ucayali[12]) (33) Campa[13]), (48) Tariana[14]), and (48) Arapaso[15]) (on the Cairáy Uaupés).

In Peru, Argentina and Chile calabashes graven by fire have been frequently discovered, e. g. at (13) Arica[16]), (A)

[1]) (2), Vol. 2, fig. 107.
[2]) M. f. V. C. (17069). FRIČ Collection.
[3]) MAX SCHMIDT (4), p. 223.
[4]) MAX SCHMIDT (3), fig. 227-230.
[5]) KRAUSE, p. 280; M. f. V. L.
[6]) M. C. (IIc. 054).
[7]) M. C. (IIc. 042).
[8]) M. f. V. B. (V. B. 4172).
[9]) UHLE (1), Vol. 2, Pl. 4, fig. 11.
[10]) M. f. V. B. (V. A. 61234).
[11]) M. f. V. H. (11, 17:57-58; 11, 17:29).
[12]) M. f. V. B. (V. A. 10882). **(not marked on the map).**
[13]) M. f. V. B. (V. A. 10883).
[14]) M. f. V. B. (V. B. 0500).
[15]) M. f. V. B. (V. B. 5935).
[16]) UHLE (1), Vol. 1. Pl. 25, fig. 19.

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

Ancon [1]), (K) Trujillo [2]), (y) Cuzco (Paucartambo [3]), (G) Quiaca [4]), (C) Calama [5]), (E) La Paya [6]) and in (F) San Juan [7]).

In some parts the Indians may have learnt the encaustic ornamentation of calabashes from whites and negroes. It is evident, however, that this kind of ornamentation *mainly occurs in the west of S. America*, and I deem it in the highest degree probable that the Chaco Indians took over the art of pyrograving from the western area of culture.

The question arises whether this process of ornamentation did not originate in a district where the people had at their disposal metal implements by means of which figures might easily be burnt into wood or similar material.

Among the Choroti and Ashluslay in the Chaco pyrograving is performed on whistles and cases, as well as on reed flutes.

Calabashes with engraved ornamentation are distributed over a very wide area. I will only mention here the tribes among whom I have myself seen them:- viz. the Choroti, Ashluslay, Mataco, Toba, Tapiete, Tsirakua, Chiriguano, Chané, Churápa, and Vuracáre.

The calabashes of the Choroti and Ashluslay Indians are never painted, nor are they blackened inside, like the calabashes of the Guarayú and many other tribes.

As regards the ornamentation itself, I do not venture to assign any particular quarter as its source. It may possibly be an imitation of the ornaments on the calabashes of more civilized tribes. I am not able, however, to adduce any proof of this.

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[1]) Reiss und Stübel, Vol. 3, Pl. 82.
[2]) M. C. (O. D. I. c. 249).
[3]) M. f. V. B. (V. A. 8000)
[4]) Nordenskiold (3), p. 29, R. M. (00. 1. 434).
[5]) Uhle (5), p. 109.
[6]) Ambrosetti (6), p. 543.
[7]) Debenedetti (4), p. 64, fig. 35.